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30 June 2005

IP Australia
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Dear Madam

International Patent Application PCT/AU2004/001362
Eastland Medical Systems Ltd.
Inoculation Device

Further to the International Search Report which has issued in respect of the above application, please find enclosed with this letter a Demand requesting International Preliminary Examination of the above application. Fees to the value of \$768 accompany this letter in payment of the prescribed fees.

In regard to the Written Opinion of the International Searching Authority which accompanied that search report, we have amended the specification and enclose with this letter a copy of the Statement of Proposed Amendments together with fresh pages 1,2 and 3 and fresh pages 10, 11, 12 and 13 together with a copy of those pages showing the amendments that have been made to the pages.

It is our opinion that the invention of the above application can be clearly distinguished from each of the disclosures referred to by the Examiner. None of the citations disclose an arrangement whereby a needle is capable of both longitudinal movement and lateral movement within a body whereby the needle is capable of moving through a series of stations disposed laterally relative to the longitudinal movement as is the case of the present invention.

We look forward to receiving notification that the invention as claimed is both novel and inventive.

Yours faithfully
WRAY & ASSOCIATES


Errol J Harwood

Enc: Fee:\$768.00.
Statement of Proposed Amendments
Fresh pages 1,2,3 and 10,11,12,13 & marked-up pages

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Patent and Trade Marks Attorneys
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COMMONWEALTH OF AUSTRALIA

The Patents Act 1990

IN THE MATTER of
Patent Application
PCT/AU2004/001362 in the
name of Eastland Medical
Systems Ltd.


- and -

IN THE MATTER of the
Examiner's objections thereto.

FIRST STATEMENT OF PROPOSED AMENDMENTS

1. Cancel pages 1,2 3, 10, 11, 12, and 13 of the description presently on file and replace with substitute pages 1, 2 ,3, 10, 11,12 and 13 enclosed herewith.

Dated this THIRTIETH day of June 2005.


a patent attorney of the firm
WRAY & ASSOCIATES,
patent attorneys for and on behalf of the applicant.

To the Commissioner of Patents,
Commonwealth of Australia.

"Inoculation Device"

Field of the Invention

This invention relates to an inoculation means.

Throughout the specification, unless the context requires otherwise, the word "comprise" or variations such as "comprises" or "comprising", will be understood to
5 imply the inclusion of a stated integer or group of integers but not the exclusion of any other integer or group of integers.

Background of the Invention

This invention relates to a means to facilitate inoculation of patients which requires the creation of a number of punctures in the skin of a patient. An
10 example of the application of the invention relates to inoculation against small pox by utilisation of a suitable vaccine. It is a characteristic of such inoculation that rather than inject the medium into the muscle tissue of the body it is necessary to introduce the medium into the skin or epidermis of the patient at a number of locations.

15 Disclosure of the Invention

According to one aspect the invention resides in an inoculation device comprising a body having a fixed portion and a moveable portion, said fixed portion having a front face, the moveable portion supported from the fixed portion rearward of the front face, a needle supported from the movable portion to be moveable
20 longitudinally on relative movement of the movable portion with respect to the fixed portion, towards and away from the front face whereby the free end of the needle is caused to undergo a longitudinal movement between a retracted position at which the free end of the needle lies to the rear of the front face and an extended position at which the free end of the needle extends in front of the front
25 face, said movable portion being biased to the retracted position, an indexing means provided between the moveable portion and the fixed portion to cause an

indexing lateral movement of the needle in a direction transverse to the longitudinal movement through a plurality of stations in association with the longitudinal movement of the needle wherein on each longitudinal movement the needle is located at a separate station

- 5 According to a preferred feature of the invention the front face is closed and is provided with an aperture which defines a path for the lateral movement of the needle and through which the needle extends when in its extended position, said stations being located along said path .

- (10 According to a preferred feature of the invention the indexing means causes the needle to move to a final station located beyond the path defined by the aperture on completion of passage of the needle along the path.

- According to a preferred feature of the invention the needle occupies an initial position prior to undergoing any longitudinal movement at which the needle is retracted and the needle is out of longitudinal alignment with the path and on the 15 initial movement of the needle it moves to an initial position and into longitudinal alignment with the path.

- (According to another aspect the invention resides in an inoculation device comprising a body having a fixed portion and a moveable portion, said fixed portion comprising a substantially cylindrical body having a front face, the 20 moveable portion being slidably and rotatably within the body, a needle supported from the movable portion to be moveable longitudinally on relative movement of the movable portion with respect to the fixed portion, towards and away from the front face whereby free end of the needle is caused to undergo a longitudinal movement between a retracted position at which the free end of the needle lies 25 rearward of the front face and an extended position at which the free end of the needle extends forward of the front face, said movable portion being biased to the retracted position, the needle being supported such that its central axis is offset from the axis of rotation of the movable portion within the fixed portion an indexing means provided between the moveable portion and the fixed portion to cause an 30 indexing lateral movement of the needle in a direction transverse to the

longitudinal movement about the axis of rotation, in association with the longitudinal movement of the needle wherein on each longitudinal movement the needle is located at a separate station.

5 According to a preferred feature of the invention the movable portion is capable of rotational movement in one direction about the axis of rotation.

10 According to a preferred feature of the invention the front face is closed and is provided with an at least partially annular aperture which defines a path for the lateral movement of the needle and through which the needle extends when in its extended position, said stations being located along said path. According to one embodiment the aperture is part annular. According to a preferred feature of the invention the indexing means causes the needle to move to a final station located beyond the path on completion of passage of the needle along the path. According to a preferred feature of the invention the needle occupies an initial position prior to undergoing any longitudinal movement at which the needle is retracted and the needle is out of longitudinal alignment with the path and on the initial movement of the needle it moves to an initial station into longitudinal alignment with the path.

20 According to a preferred feature of both aspects of the invention the indexing means is adapted to cause the lateral movement whilst the needle is undergoing its longitudinal movement. According to a preferred feature the indexing means is adapted to cause the lateral movement during the movement of the needle from its retracted position to its extended position. According to an alternative preferred feature the indexing means is adapted to cause the lateral movement during the movement of the needle from its extended position to its retracted position. According to an alternative preferred feature the indexing means is adapted to cause the lateral movement during the movement of the needle from its retracted position to its extended position and from its extended position to its retracted position.

30 According to a preferred feature of both aspects of the invention the front face is open.

Claims

The claims defining the invention are as follows:

1. An inoculation device comprising a body having a fixed portion and a moveable portion, said fixed portion having a front face, the moveable portion supported from the fixed portion rearward of the front face, a needle supported from the movable portion to be moveable longitudinally on relative movement of the movable portion with respect to the fixed portion, towards and away from the front face whereby the free end of the needle is caused to undergo a longitudinal movement between a retracted position at which the free end of the needle lies to the rear of the front face and an extended position at which the free end of the needle extends in front of the front face, said movable portion being biased to the retracted position, an indexing means provided between the moveable portion and the fixed portion to cause an indexing lateral movement of the needle in a direction transverse to the longitudinal movement through a plurality of stations in association with the longitudinal movement of the needle wherein on each longitudinal movement the needle is located at a separate station.
2. An inoculation device as claimed at claim 1 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle is undergoing its longitudinal movement.
3. An inoculation means as claimed at claim 2 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle from its retracted position to its extended position.
4. An inoculation means as claimed at claim 2 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle from its extended position to its retracted position.
5. An inoculation means as claimed at claim 2 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle

from its retracted position to its extended position and from its extended position to its retracted position.

- 5 6. An inoculation device as claimed at claim 1 or 2 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle prior to the needle undergoing its longitudinal movement.
7. An inoculation device as claimed at claim 1 or 2 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle subsequent to the needle undergoing its longitudinal movement.
- 10 8. An inoculation means as claimed at any one of the preceding claims wherein the front face is open.
- 15 9. An inoculation means as claimed at any one of claims 1 to 7 wherein the front face is closed and is provided with an aperture which defines a path for the lateral movement of the needle and through which the needle extends when in its extended position, said stations being located along said path.
- 20 10. An inoculation means as claimed at claim 9 wherein the indexing means causes the needle to move to a final station located beyond the path on completion of passage of the needle along the path.
- 25 11. An inoculation means as claimed at claim 9 or 10 wherein the needle occupies an initial position prior to undergoing any longitudinal movement at which the needle is retracted and the needle is out of longitudinal alignment with the path and on the initial movement of the needle it moves to an initial station and into longitudinal alignment with the path.
12. An inoculation device comprising a body having a fixed portion and a moveable portion, said fixed portion comprising a substantially cylindrical body having a front face, the moveable portion being slidably and rotatably within the body, a needle supported from the movable portion to be

- moveable longitudinally on relative movement of the movable portion with respect to the fixed portion, towards and away from the front face whereby the free end of the needle is caused to undergo a longitudinal movement between a retracted position at which the free end of the needle lies rearward of the front face and an extended position at which the free end of the needle extends forward of the front face, said movable portion being biased to the retracted position, the needle being supported such that its central axis is offset from the axis of rotation of the movable portion within the fixed portion an indexing means provided between the moveable portion and the fixed portion to cause an indexing lateral movement of the needle in a direction transverse to the longitudinal movement about the axis of rotation, in association with the longitudinal movement of the needle wherein on each longitudinal movement the needle is located at a separate station.
13. An inoculation means as claimed claim 12 wherein the movable portion is capable of rotational movement in one direction about the axis of rotation.
14. An inoculation means as claimed at claim 12 or 13 wherein the front face is open.
15. An inoculation means as claimed claim 12 or 13 wherein the front face is closed and is provided with a an at least partially annular aperture which defines a path for the lateral movement of the needle and through which the needle extends when in its extended position, said stations being located along said path..
16. An inoculation means as claimed claim 15 wherein the aperture is part annular.
17. An inoculation means as claimed at claim 16 wherein the indexing means causes the needle to move to a final station is located beyond the path on completion of passage of the needle along the path.

- 5 18. An inoculation means as claimed at claim 16 or 17 wherein the needle occupies an initial position prior to undergoing any longitudinal movement at which the needle is retracted and the needle is out of longitudinal alignment with the path and on the initial movement of the needle it moves to an initial station and into longitudinal alignment with the path.
19. An inoculation device as claimed at any one of claims 12 to 18 wherein the indexing means is adapted to cause the lateral movement whilst the needle is undergoing its longitudinal movement.
- 10 20. An inoculation means as claimed at any one of claims 12 to 19 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle from its retracted position to its extended position.
21. An inoculation means as claimed at any one of claims 12 to 19 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle from its extended position to its retracted position.
- 15 22. An inoculation means as claimed at any one of claims 12 to 19 wherein the indexing means is adapted to cause the lateral movement during the movement of the needle from its retracted position to its extended position and from its extended position to its retracted position.
- 20 23. An inoculation device as claimed at any one of claims 12 to 18 wherein the indexing means is adapted to cause the lateral movement prior to the needle undergoing its longitudinal movement.
24. An inoculation device as claimed at any one of claims 12 to 18 wherein the indexing means is adapted to cause the lateral movement subsequent to the needle undergoing its longitudinal movement.
- 25 25. An inoculation means substantially as herein described.